



Community Health Worker Model:

A Collaborative Approach
to Cardiovascular Health

Amy Bubar, MPH
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CHHS Program Staff

- Mori Krantz, MD, Co-investigator
- Elizabeth Whitley, PhD, Co-investigator
- Stephanie Coronel, MPH, CHES: Senior Program Manager
- Amy Bubar, MPH: Project Manager



Program Goal

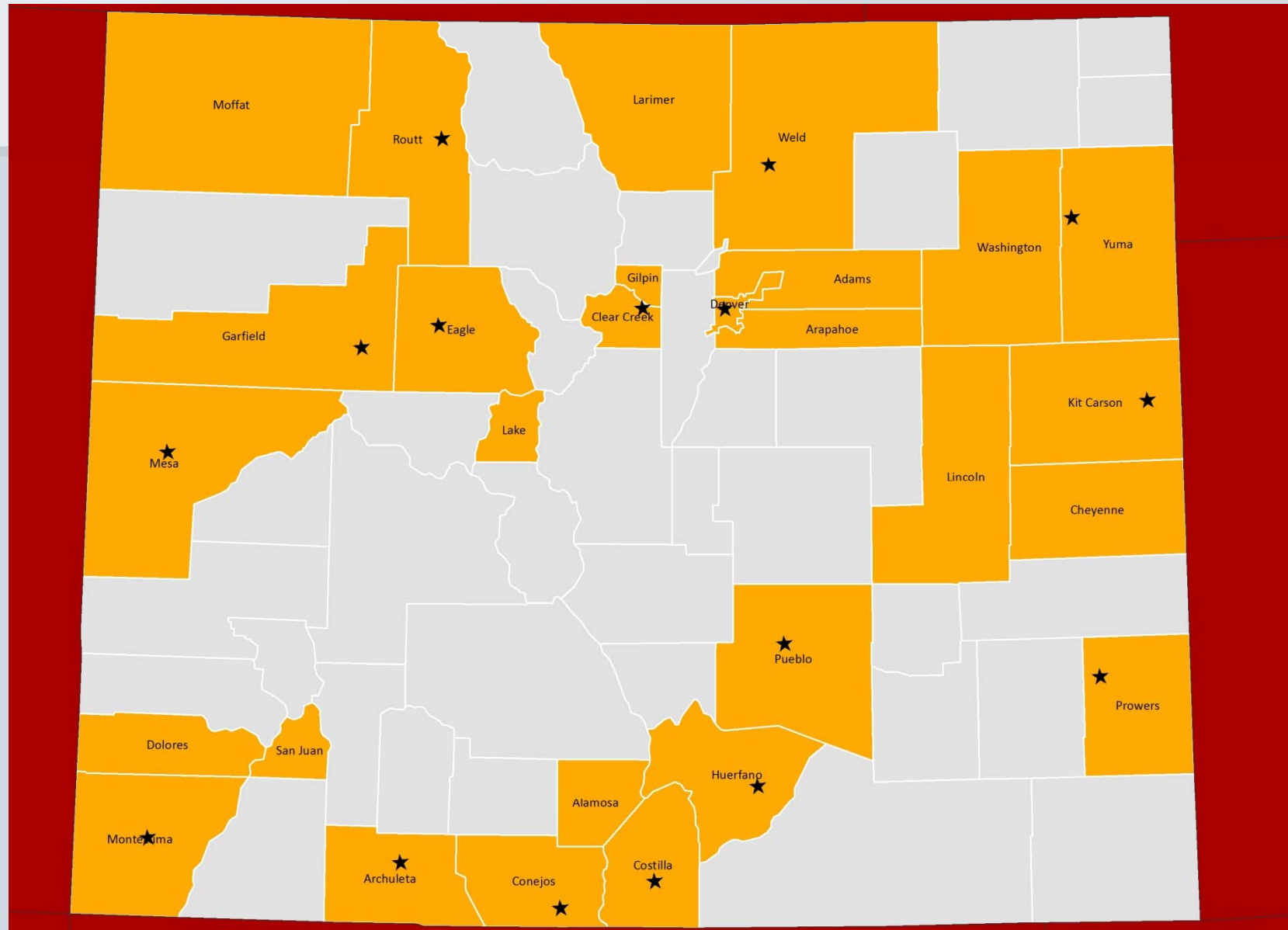
Improve Cardiovascular Health of
Adults in Colorado Communities

CHHS Community Health Workers....

An integral piece of the puzzle



Current CHHS Communities

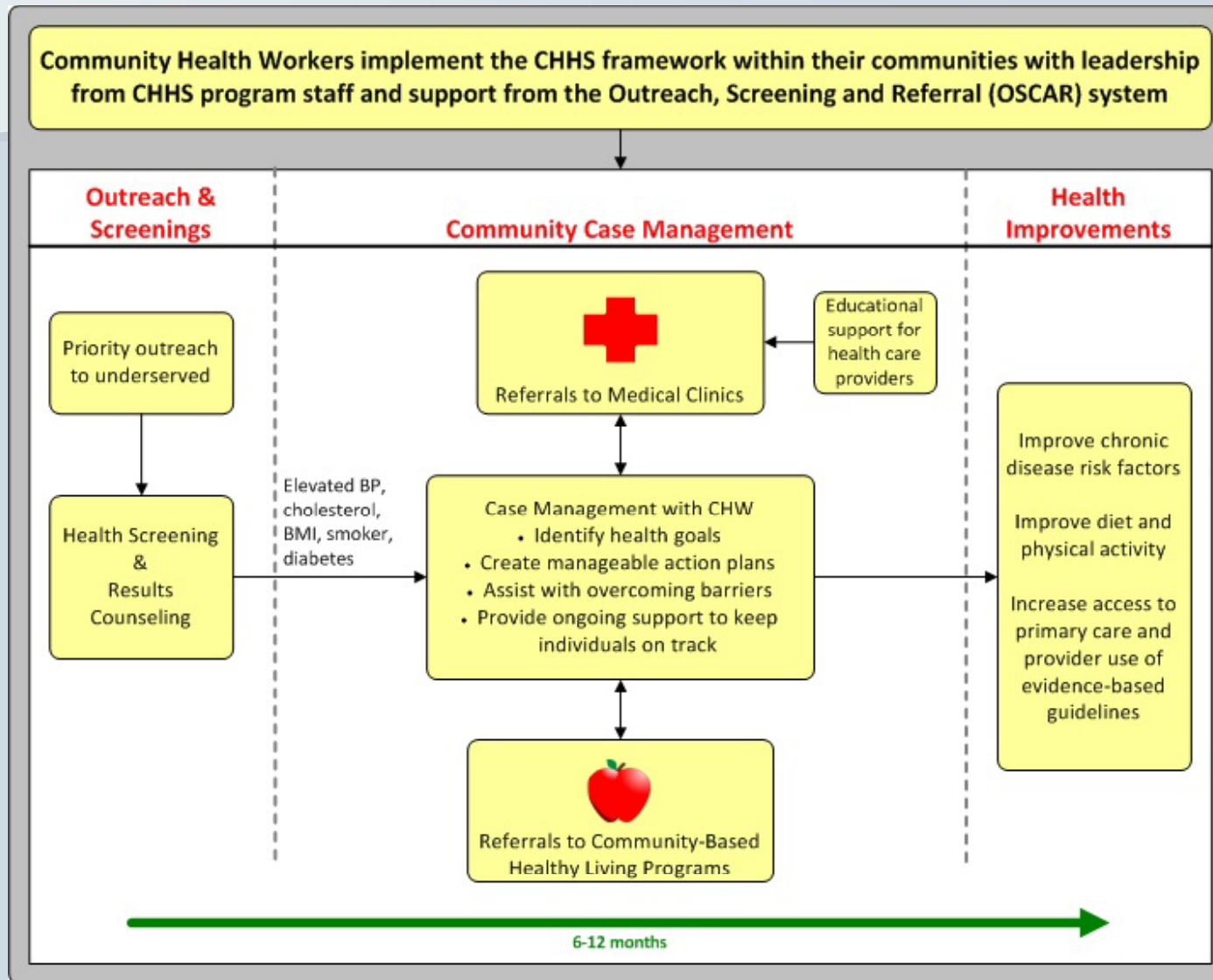


Current CHHS Partners

- 6 local public health agencies
- 5 community hospitals
- 1 community health centers
- 1 visiting nurse association
- 1 area health education center

Partners
Clear Creek County Public Health
Costilla County Public Health Agency
Conejos County Hospital
Denver Health Community Voices
High Plains Community Health Center
Kit Carson County Health & Human Services
Montezuma County Health Department
Mesa County Health Department
Northwest Colorado Visiting Nurse Association
Pagosa Springs Medical Center
San Luis Valley Area Health Education Center
Spanish Peaks Regional Health Center
Vail Valley Medical Center
Yuma District Hospital

CHHS Model



Unique focus on local community resources

- Work through CHWs to reach at-risk community members
- Employ CHWs through local agencies
- Refer at-risk individuals to local health care providers and/or healthy living resources
- Accommodate referrals from health care providers
- Increase capacity of local programs



CHWs conduct screenings and retests...



...Individually in the Office



*...In Small Groups in the Community
such as Barbershops*




...In Large Groups in the Community

Outreach, Screening and Referral System (OSCAR)

Maria L Jorge

9/30/2010 at CPC



LOW 0% 10% 20% HIGH

Comments

Lifestyle Goals

Targets

Save

Cancel

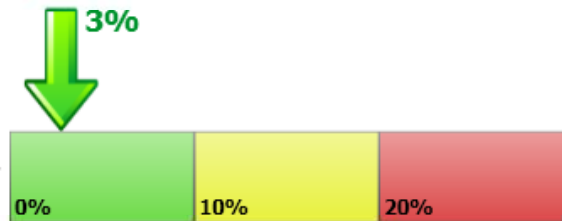
71% Complete

Submit

Previous Interview: N/A

Summary and Results

29 BMI



LOW 0% 10% 20% HIGH

Your Customized Health Prescription

♥ Congratulations! You are at LOW risk of having a heart attack or stroke in the next 10 years.

♥ 3 of 100 people with your score will have a heart attack or stroke in the next 10 years.

♥ Even though you are at low risk today, your high blood pressure is/are increasing your chance of having a heart attack or stroke in the more distant future.

♥ Because you are at low risk, we do not recommend aspirin for your heart

♥ Congratulations! Your LDL (bad) cholesterol is 101; goal is less than 130

♥ Attention! Your systolic blood pressure (top number) is 140; goal is less than 140

General Health

Lifestyle Guidance

Foundation for OSCAR Outputs

- American Heart Association
- NCEP ATP III Target Calculator
- JNC 7
- Colorado Clinical Guidelines Collaborative

Sample Provider Letter



Montezuma County
Health Department
970-565-3056

Karen Dickson
Community Health Worker

Lori Cooper, RN
Director, Montezuma County Public
Health Department

Colorado Prevention Center
303-860-9900

Mori Krantz, MD
Director, Prevention Programs
Cardiologist, Denver Health
Project Director, CHHS

Ray Estacio, MD
Sr. Scientist, Prevention Programs
Internist, Denver Health

Matt Guy, MPA
Community Health Coordinator
Montezuma County Liaison

Community Voices
303-436-4070

Liz Whitley, PhD, RN
Director, Denver Health
Community Voices

Program website:
www.hearthealthysolutions.org

Framingham risk assessment:
www.health-e-solutions.org

Southwest Internal Medicine February 11, 2009
Dr. Robin Page
111 N. Park Ave.
Cortez, CO 81321

Regarding: Patient's name DOB: 99/99/99

Dear Dr. Page,

The following individual participated in a free cardiovascular and cholesterol screening held at the **Montezuma County Public Health Department on 2/6/09**. Below are the individual's screening results:

- Fasting: **no**
- Blood pressure= **121/92 mmHg**
- Total cholesterol= **270 mg/dL**
- HDL= **94 mg/dL**
- LDL= **155 mg/dL**
- Triglycerides= **106 mg/dL**
- Glucose= **108 mg/dL**
- Smoking status= **non-smoker**
- BMI: **29**
- Framingham risk score= **5%**
(<10%=low, 10-20%=moderate, >20%=high)

Colorado Heart Healthy Solutions is a cardiovascular screening and referral program that employs a Community Health Worker in your region. The Community Health Worker screens individuals for high blood pressure, high cholesterol levels, smoking status and elevated BMI. Our program goal is to identify at-risk individuals and refer them to a medical provider in order to address their identified risk(s).

If you have any questions regarding Colorado Heart Healthy Solutions or the screening and referral process please do not hesitate to contact me at **970-565-3056 ext. 255** or kdickson@co.montezuma.co.us.

Thank you for your assistance in the referral process for Colorado Heart Healthy Solutions. It is through strong partnerships with excellent medical providers that together, we can reduce cardiovascular disease in Colorado.

Sincerely,

Karen Dickson
Community Health Worker



My Current Location:

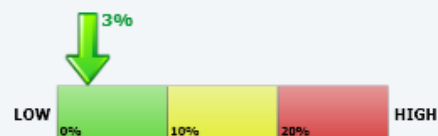
Acme Clinic
115 15th St. Idaho Springs

English



Maria L Jorge

9/30/2010 at CPC



Comments

Lifestyle Goals

Targets



Save



Cancel



66% Complete



Submit

Previous Interview: N/A ★

Lifestyle Guidance

How ready are you to make changes to improve your health?

- ☐ Not thinking about change
- ☐ Thinking about change
- ☐ Preparing for change
- ☐ Changing
- ☐ Maintaining Change

What would you most like to work on to lower your risks?

- ☐ Cut down on smoking
- ☐ Improve cholesterol
- ☐ Lower blood pressure
- ☐ Lose weight
- ☐ See a health care provider
- ☐ Increase physical activity
- ☐ Improve nutrition

How important is it?

Not important

5

Very important

Action Plan (try to include how much, when and how often in the action plan)

How sure are you right now that you'll be able to do this?

Not sure

5

Very sure



Summary and Results

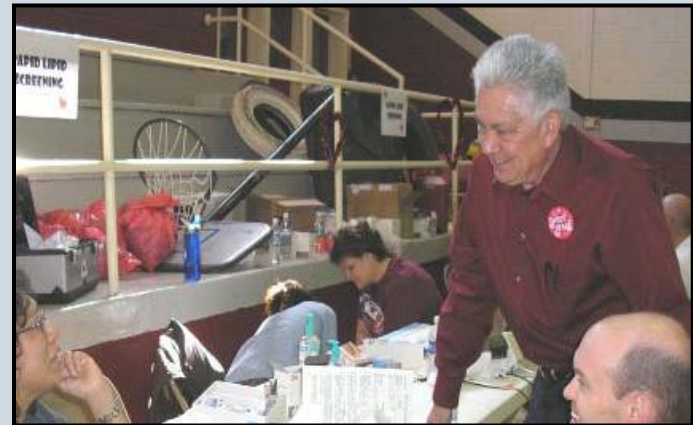
Referrals and Follow Up



Demographics of Clients Served

July 2010 – June 2011

- Clients Screened: 3,443
- 90% underserved*
- 63% at-risk for CVD



*Underserved=ethnic minorities, the poor, those with less education, un- or under-insured and those who live far from resources in rural and frontier communities.

Risk Profile of Clients Served

July 2010 – June 2011

- At-risk Clients Identified: 2,159
- Risk Profile:

At-risk for CVD*	63%
Blood Pressure above normal	26%
Cholesterol above normal	45%
BMI above normal	61%
Smoker	14%

*At-risk = clients with moderate or high Framingham risk scores (>10%) or those with an abnormal risk factors



CHHS Outcomes

July 2010 – June 2011

- At-risk clients returning for retest: 2,907
 - Mean time from screening to retest: 14 months

■ Clinical Outcomes

	Baseline (mean \pm SD)	Change from baseline (mean)
Total Cholesterol	207 \pm 41 mg/dL	-10.6
LDL Cholesterol	126 \pm 37 mg/dL	-15.7
Systolic BP	130 \pm 18 mmHg	-4.6
Framingham Risk Score	10 \pm 10%	-0.5

CHHS Outcomes

July 2010 – June 2011

■ Behavioral Outcomes

	% Improved
Decreased Fat Intake	27%
Increased Fiber Intake	16%
Increased Physical Activity	28%

The CHW Model: A Shared Approach

- Proven effective
- Community presence and client rapport
- Knowledge & experience
- Clinic/public health agency-based
- Existing partnerships
- Comprehensive database of client information

For more information:

- www.cpccommunityhealth.org
- Amy Bubar, MPH
 - amy.bubar@cpccommunityhealth.org
 - (303)860-9900